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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/683,843	02/21/2002	Sen-Ta Chan	WISP0001USA	9678

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NORTH AMERICA INTERNATIONAL PATENT OFFICE (NAIPC)
P.O. BOX 506
MERRIFIELD, VA 22116

EXAMINER

CHOUDHURY, AZIZUL Q

ART UNIT	PAPER NUMBER
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2145

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/683,843

Applicant(s)

CHAN ET AL

Examiner

Azizul Choudhury

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Detailed Action

This office action is in response to the amendment received on March 18, 2005.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark et al (US Pat No: US006131117A) in view of Zhang (US Pat No: US006889251B1), hereafter referred to as Clark and Zhang, respectively.

1. With regards to claims 1, 11, 21, 31, 32, 33, 36, 37 and 38, Clark teaches through Zhang, a remote console for controlling power-on processes of a plurality of computers connected to a network, each of the computers comprising: a basic input/output system (BIOS) for executing a power-on process of the computer; an input buffer for storing input control signals; an output buffer for storing output video signals; and a virtual POST (power-on self test) daemon embedded in the basic input/output system for processing signals of the computer and receiving controls of the remote console, the virtual POST daemon comprising: an input receiving module for receiving input control data from the remote console via the network; an input detection module for detecting whether the input buffer has any

input control signals and executing the input control signals; a first conversion module for converting the output video signal stored in the output buffer into output video data and restoring the received input control data to the input control signal and then storing the input control signal in the input buffer; and an output transferring module for transferring the output video data to the remote console via the network; the remote console comprising: an input device for generating the input control signal of the power-on process for the computer; an output device for displaying the corresponding output video signal of the power-on process for the computer; and a remote console manager for processing signals of the computer and controlling operations of the computer, the remote console manager comprising: an output receiving module for receiving the output video data from the computer via the network; a second conversion module for converting the generated input control signal into the input control data and restoring the output video data to the corresponding output video signal; and an input transferring module for transferring the input control data to the computer via the network; wherein the input control signal generated by the input device of the remote console is transferred to the virtual POST daemon of the computer via the network for controlling operations of the BIOS, and the virtual POST daemon transfers an output signal of the computer to the output device of the remote console via the network for displaying a power-on status of the computer

(Clark teaches a network management design (column 4, lines 38-41, Clark) with agents (also known as daemons) that communicate with a management

console (equivalent to the claimed remote console) (column 4, line 53 – column 5, line 13, Clark). The claimed features such as BIOS and input and output means are inherently present within computer systems and Clark's design uses computers for both hosts and clients. In addition, agents such as the ones in Clark's design are able to perform diagnostic tasks on client computers they are attached to and communicate that information with the management console (remote console). The agents exist to communicate the features and status of the computers they are within to the management console. Since communication is performed, that means that input/output means along with the appropriate signal conversion must also occur. As for the BIOS, the computers of Clark's design have NetBIOS. This allows the management console to manage the computers with NetBIOS while in POST. A computer with a NetBIOS has a BIOS with networking capabilities built right into the BIOS as claimed. Additionally, the design allows for the management for the purposes of activating/deactivating the computers with NetBIOS and monitoring their activities (column 10, lines 30-34, Clark). However, Clark does not specifically disclose that the agent is within the BIOS.

Zhang teaches a computer network design. Within the design, Zhang discloses that agents that are able to access networks that exist within the BIOS are available (Claim 9, Zhang).

Both Clark and Zhang teach designs that make use of network accessing agents. While Clark does not disclose the location of the agent being within the

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BIOS, Zhang teaches that agents are able to exist within the BIOS. Therefore it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Clark with those of Zhang to "clientify" the platform during system BIOS boot (column 1, lines 41-52, Zhang)).

2. With regards to claims 2, 12 and 22, Clark teaches through Zhang the remote console wherein the input device is a keyboard

(All computers require input devices. Clark's design uses computers (column 4, lines 38-41, Clark). However, Clark does not specifically disclose that the agent is within the BIOS.

Zhang teaches a computer network design. Within the design, Zhang discloses that agents that are able to access networks that exist within the BIOS are available (Claim 9, Zhang).

Both Clark and Zhang teach designs that make use of network accessing agents. While Clark does not disclose the location of the agent being within the BIOS, Zhang teaches that agents are able to exist within the BIOS. Therefore it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Clark with those of Zhang to "clientify" the platform during system BIOS boot (column 1, lines 41-52, Zhang)).

3. With regards to claims 3, 13 and 23, Clark teaches through Zhang, the remote console wherein the input device is a pointing device

(All computers require input devices. Clark's design uses computers (column 4, lines 38-41, Clark). However, Clark does not specifically disclose that the agent is within the BIOS.

Zhang teaches a computer network design. Within the design, Zhang discloses that agents that are able to access networks that exist within the BIOS are available (Claim 9, Zhang).

Both Clark and Zhang teach designs that make use of network accessing agents. While Clark does not disclose the location of the agent being within the BIOS, Zhang teaches that agents are able to exist within the BIOS. Therefore it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Clark with those of Zhang to "clientify" the platform during system BIOS boot (column 1, lines 41-52, Zhang)).

4. With regards to claims 4, 14 and 24 Clark teaches through Zhang, the remote console wherein the pointing device is selected from a group consisting of a mouse and a trackball

(All computers require input devices. Clark's design uses computers (column 4, lines 38-41, Clark). However, Clark does not specifically disclose that the agent is within the BIOS.

Zhang teaches a computer network design. Within the design, Zhang discloses that agents that are able to access networks that exist within the BIOS are available (Claim 9, Zhang).

Both Clark and Zhang teach designs that make use of network accessing agents. While Clark does not disclose the location of the agent being within the BIOS, Zhang teaches that agents are able to exist within the BIOS. Therefore it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Clark with those of Zhang to “clientify” the platform during system BIOS boot (column 1, lines 41-52, Zhang)).

5. With regards to claims 5, 15, 25, 34, 35, 39 and 40, Clark teaches through Zhang, the remote console wherein the computer further comprises: an operating system (OS) for controlling operations of the computer; and a virtual OS KVM daemon installed in the OS for providing a network function, an operation status of the computer being transferred to the remote console via the network, and for providing a command received from the remote console via the network for controlling an operation procedure of the computer; wherein the input control signal generated by the input device of the remote console is transferred to the virtual POST daemon of the computer via the network, and the virtual POST daemon of the computer transfers the operation status of the computer to the output device of the remote console via the network

(Clark teaches a network management design (column 4, lines 38-41, Clark) with agents (also known as daemons) that communicate with a management console (equivalent to the claimed remote console) (column 4, line 53 – column 5, line 13, Clark). The claimed features such as BIOS and input and output means are inherently present within computer systems and Clark’s design uses

computers for both hosts and clients. In addition, agents such as the ones in Clark's design are able to perform diagnostic tasks on client computers they are attached to and communicate that information with the management console (remote console). The agents exist to communicate the features and status of the computers they are within to the management console. Since communication is performed, that means that input/output means along with the appropriate signal conversion must also occur. As for the BIOS, the computers of Clark's design have NetBIOS. This allows the management console to manage the computers with NetBIOS while in POST. A computer with a NetBIOS has a BIOS with networking capabilities built right into the BIOS as claimed. Additionally, the design allows for the management for the purposes of activating/deactivating the computers with NetBIOS and monitoring their activities (column 10, lines 30-34, Clark). Furthermore, the claimed virtual OS KVM is inherently present within Clark's design since all hosts in network management or network monitoring systems are able to switch between their managing/monitoring tasks and other tasks. However, Clark does not specifically disclose that the agent is within the BIOS.

Zhang teaches a computer network design. Within the design, Zhang discloses that agents that are able to access networks that exist within the BIOS are available (Claim 9, Zhang).

Both Clark and Zhang teach designs that make use of network accessing agents. While Clark does not disclose the location of the agent being within the

BIOS, Zhang teaches that agents are able to exist within the BIOS. Therefore it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Clark with those of Zhang to "clientify" the platform during system BIOS boot (column 1, lines 41-52, Zhang)).

6. With regards to claims 6, 16 and 26, Clark teaches through Zhang, the remote console wherein the network is selected from a group consisting of an Internet and a local area network (LAN)

(Clark's design allows for networks (Figure 2, Clark). In addition, the design also allows for IP (Internet Protocol) routers (column 4, line 60, Clark). Hence Internet means are also present.. However, Clark does not specifically disclose that the agent is within the BIOS.

Zhang teaches a computer network design. Within the design, Zhang discloses that agents that are able to access networks that exist within the BIOS are available (Claim 9, Zhang).

Both Clark and Zhang teach designs that make use of network accessing agents. While Clark does not disclose the location of the agent being within the BIOS, Zhang teaches that agents are able to exist within the BIOS. Therefore it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Clark with those of Zhang to "clientify" the platform during system BIOS boot (column 1, lines 41-52, Zhang)).

7. With regards to claims 7, 9, 17, 19, 27 and 29, Clark teaches through Zhang, the remote console wherein the computer is selected from a group consisting of a personal computer (PC), a server, and a notebook

(Clark's design allows for the use of computers (column 4, lines 38-41, Clark).

PCs, servers and notebooks are all computers. However, Clark does not specifically disclose that the agent is within the BIOS.

Zhang teaches a computer network design. Within the design, Zhang discloses that agents that are able to access networks that exist within the BIOS are available (Claim 9, Zhang).

Both Clark and Zhang teach designs that make use of network accessing agents. While Clark does not disclose the location of the agent being within the BIOS, Zhang teaches that agents are able to exist within the BIOS. Therefore it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Clark with those of Zhang to "clientify" the platform during system BIOS boot (column 1, lines 41-52, Zhang)).

8. With regards to claims 8, 18 and 28 Clark teaches through Zhang, the remote console wherein the remote console is capable of executing a power-on process for the computer via the network

(Clark's design allows for the activating/deactivating of resources (computers are one such resource) on the network (column 10, lines 30-34, Clark).

However, Clark does not specifically disclose that the agent is within the BIOS.

Zhang teaches a computer network design. Within the design, Zhang discloses that agents that are able to access networks that exist within the BIOS are available (Claim 9, Zhang).

Both Clark and Zhang teach designs that make use of network accessing agents. While Clark does not disclose the location of the agent being within the BIOS, Zhang teaches that agents are able to exist within the BIOS. Therefore it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Clark with those of Zhang to "clientify" the platform during system BIOS boot (column 1, lines 41-52, Zhang)).

9. With regards to claims 10, 20 and 30, Clark teaches through Zhang, the remote console wherein a password is stored in the computer, when the remote console logs into the computer, the remote console has to input an identical password via the input device to execute a verification procedure

(The networked computers of Clark's design have operating systems (column 6, lines 4-5, Clark). In addition, the management of the computers is performed from a management console (also a computer with an operating system). It is inherent that the management console (remote console) requires a user to sign in or log in to ensure that an authorized user performs the management of the

network. However, Clark does not specifically disclose that the agent is within the BIOS.

Zhang teaches a computer network design. Within the design, Zhang discloses that agents that are able to access networks that exist within the BIOS are available (Claim 9, Zhang).

Both Clark and Zhang teach designs that make use of network accessing agents. While Clark does not disclose the location of the agent being within the BIOS, Zhang teaches that agents are able to exist within the BIOS. Therefore it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Clark with those of Zhang to "clientify" the platform during system BIOS boot (column 1, lines 41-52, Zhang)).

Response to Remarks

The amendment received on March 18, 2005 has been evaluated but is not deemed fully persuasive. The primary concern addressed within the remarks is the location of the agent within the Clark prior art. The claimed invention places the agent/daemon within the BIOS and the applicant's representative feels that Clark's design lacks such traits since it is not specifically detailed. Hence the examiner has provided the Zhang prior art to illustrate that the placement of agents/daemons within the BIOS is well known.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Azizul Choudhury whose telephone number is (571) 272-3909. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia Martin-Wallace can be reached on (571) 272-6159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AC


VALENCIA MARTIN-WALLACE
SUPERVISORY PATENT EXAMINER